SUMMARY

In FY 1998, Science and Technology consists of Pacific Northwest National Laboratory (Pacific Northwest) Waste Management (WBS 1.7.1.1, Project Baseline Summary [PBS] ST01) and Science and Technologies (WBS 1.7.2.1, PBS ST02). PBS ST02 is DOE-HQ work scope, which is currently unfunded.

The revised Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit, Revision 4, was issued January 28, 1998. RL EAP (Environmental Assurance, Permits, and Policy) is considering an appeal of the 325 permit conditions. Appeal of this permit would cost between $30,000 and $50,000, and delay implementation of only the appealed condition for three to six months depending on the outcome of negotiations at the local level.

Work plans for removing the sea water tank adjacent to the Plant Growth Facility and the waste oil separator system adjacent to the Program Development Lab - East (PDL-E) were drafted and the facility modification for PDL-E was approved. The sea water tank adjacent to the Plant Growth Facility was removed on February 9. The excavation was visually inspected for contamination, and photographed prior to back filling. The tank was destroyed and taken to the Richland landfill for disposal. A receipt for the tank was received from the Richland landfill.

Implementation of initiatives within Pacific Northwest's waste management system is currently underway with anticipated savings of about $200,000 to be returned to this Program within the next two months for reallocation.

The low level waste (LLW) compactor is in place in the 325 Building, Room 43. The radiation work permits (RWPs) and technical procedures are in place and the x-ray unit will verify the contents of the first set of bagged waste in March. One remaining issue is the actual restart of the compactor unit, which is awaiting delivery of the hydraulic oil for restart.

Shipments of mixed waste to the Central Waste Complex (CWC) were completed in February. Wastes that historically were slated for Radioactive Liquid Waste System (RLWS) disposal are now being packaged into labpacks for shipment to the CWC. This effort will cause an increase in labpack shipments for the next several months until the RLWS modifications are completed.

All required air and water samples were collected during the month of February and confirmed that all effluents discharged were below historical release levels and compliant with existing permits. The volatile organic compound stack testing required by the Environmental Molecular Sciences Laboratory (EMSL) construction permit was completed.

The EMSL volatile organic compound stack testing was completed on February 18, and demonstrated that emissions are below the permit emissions limit. A draft of the source

testing report was prepared and is on schedule. A savings of approximately $26,000 was achieved by sampling design and by performing the work in-house.

The readiness assessment methodology for the RLWS has been reviewed with the project team. The procedures for the operation of the tank in the 325 Building and 204 AR Building have been drafted and the review started in February.

Construction is progressing as scheduled on the 325 Building Radioactive Liquid Waste (RLW) Load Out Modifications project. The tank fabrication is proceeding at Alaskan Copper as bid. The existing wall in the basement, where the new control and equipment rooms will be located, was removed. The placing of the new concrete pads for the equipment was completed in February and the piping runs are complete except for the final tie-ins.

A review of design ideas for the 204 AR Building Modifications was discussed with 204 AR Building personnel and a general agreement on design criteria was reached. The design incorporating this agreement is progressing well and review documents will be forwarded to 204 AR Building personnel for comments in March. A baseline change request to bring schedule and budget in line with new design direction was processed, approved, and implemented in February.

Fiscal year to date milestone performance (EA, DOE-HQ, Field Office, RL) shows that three milestones were completed on or ahead of schedule; no milestones were completed late; no milestones are overdue; and no milestones are forecasted to be late.

ACCOMPLISHMENTS

- Installed the LLW compactor in the 325 Facility, Room 43. (Unplanned)
- Completed shipments of mixed waste to the CWC. (Unplanned)
- Completed the inventory of Pacific Northwest 300 Area Special Case Waste on schedule. (Planned)
- Prepared an agreement and contract on schedule for the March demolition of White Bluffs Facilities 1 and 2. (Planned)
- Completed the second review of tank issues for Peña October 21 directive, as well as six environmental and Legacy Vulnerability reviews. (Unplanned)
- Completed input to the sitewide Land Disposal Restrictions report three weeks early. (Planned)
- Completed the Annual Treatability Test Report for the Hanford Site three weeks early, which is ready to be transmitted with the Annual Dangerous Waste Report package. (RLST011813)
- Removed the sea water tank adjacent to the Plant Growth Facility on February 9, ahead of schedule. (Planned)

- Conducted 328 National Environmental Policy Act (NEPA) reviews fiscal year to date; 330 planned for FY 1998. (Planned)

COST PERFORMANCE ($M)

	BCWP*	ACWP	VARIANCE
Science & Technology	$5.6	$5.0	$0.6

* Rounding

The $0.6 million (twelve percent) favorable cost variance is primarily associated with the operating expense projects where there was a combination of billing delays and efficiencies on planned tasks. The variance will be reduced upon receipt of delayed billings. Discussions are occurring with DOE-Science and Technology Operations (STO) Division to redirect programmatic underruns to unfunded priority activities within the Program.

SCHEDULE PERFORMANCE ($M)

	BCWP*	BCWS	VARIANCE*
Science & Technology	$5.6	$6.0	($ 0.3)

* Rounding

The $0.3 million (six percent) unfavorable schedule variance is within established thresholds.

ISSUES

1) **Issue/Impact:** The 325 Permit has been issued. However, RL EAP is considering an appeal of the 325 permit conditions. An appeal of this permit would cost between $30,000 and $50,000, and delay implementation of only the appealed condition for three to six months depending on the outcome of negotiations at the local level.

   Strategy/Status: A team of Pacific Northwest staff is addressing the other conditions to meet the deadlines given in the conditions.

2) **Issue/Impact:** The Memorandum of Agreement (MOA) defining roles and responsibilities for completion of Tri-Party Agreement Milestone M-92 is not finalized. FDH is completing an internal review. Pacific Northwest must review and approve the MOA before finalization.

   Strategy/Status: The Final MOA is scheduled to be out by the end of March 1998.

3) **Issue/Impact:** The 305-B Facility will not take any more explosives into the facility, as explosives are not allowed per the Facility Use Agreement (FUA). The Permit provides that one pound may be stored, however, the FUA references regulations will not allow this.

Strategy/Status: Staff have worked with Safety personnel to identify all requirements; are in the process of obtaining all equipment; and will be modifying the Permit. Expected completion is March 30, 1998.

4) **Issue/Impact:** Pacific Northwest staff have been unable to move several transuranic waste drums from the basement of the 325 Building. These drums were scheduled to be moved for real time radiography (RTR) at the 306-E facility earlier this month.

Strategy/Status: Pacific Northwest has encountered radiological contamination issues surrounding the movement of these high dose rate containers and is seeking a waiver from Waste Management Hanford (WMH) as it pertains to visual verification of the inner contents.

5) **Issue/Impact:** The potential impacts of applying the requirements of the Model Toxic Control Act to the Atomic Energy Commission (AEC) Bus Lot Sampling and Analysis task is currently being evaluated. This has resulted in a reevaluation of the deliverable date for the AEC Bus Lot Characterization Assessment milestone identified as an internal milestone. There is currently no change in scope or anticipated costs, only the final deliverable.

Strategy/Status: The AEC bus lot characterization team met with Project, Legal, and Environmental Safety and Health (ES&H) staff to determine the mechanism for getting RL approval for involving Ecology in this task. It was further agreed that RL STO would need to approve the regulatory interaction. RL STO was briefed on the status of this task. The briefing included recognition that task costs could escalate if contamination is found during upcoming sampling and analysis activities. RL STO gave verbal approval in the meeting for work as planned.

6) **Issue/Impact:** Determination of whether polychlorinated biphenyls (PCBs) should be sampled and analyzed for the Waste Identification Data System Characterization task needs to be resolved with determination of the review cycle for the sampling plan. If Ecology reviews the sample plan, an additional three months will need to be added to the schedule.

Strategy/Status: Once a decision is made, PCB sampling will be incorporated into the schedule and a review strategy will be negotiated with RL STO.